

REMARKS

The Office Action mailed July 6, 2004 has been received and carefully noted. The following remarks are submitted as a full and complete response thereto.

No extension of time is believed to be required based upon the filing of this Amendment prior to the deadline of the three-month statutory period (i.e., October 6, 2004). Authorization is granted to charge counsel's Deposit Account No. 01-2300, referencing **Attorney Docket No. 108426-00042**, for any additional fees necessary for entry of this Amendment.

As a preliminary matter, Applicants appreciate the indication that claims 9-10, objected to as being dependent upon a rejected base claim, would be allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claims. Applicants, however, respectfully submit that all of the presently pending claims recite allowable subject matter and therefore placing claims 9-10 into independent form is believed to be unnecessary.

Claims 1, 6, 9, 11, 16, 23 and 28 have been amended and claims 3, 13, 17-22 and 25 have been cancelled. Applicants submit that the amendments made herein are fully supported in the Specification and the drawings, as originally filed, and therefore no new matter has been introduced. Accordingly, claims 1-2, 4-12, 14-16, 23-24 and 26-28 are pending in the present application and are respectfully submitted for reconsideration.

Claims 17-22 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. Claims 17-22 have been cancelled, thus rendering rejections as to these claims moot.

Claims 1, 11 and 23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the Hopf reference (JP11336626) in view of the Mastandrea patent (U.S. Patent No. 4,852,054).

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In addition, claims 1, 2, 4, 11, 12, 14, 23, 24 and 26 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the Hopf reference in view of the Chirco et al. patent (U.S. Patent No. 5,644,072). Dependent claims 2 and 4 depend from independent claim 1, dependent claims 12 and 14 depend from independent claim 11, and dependent claims 24 and 26 depend from independent claim 23. The rejections are respectfully traversed and reconsideration is requested.

In the Office Action, the Examiner has indicated that dependent claims 3, 5, 13, 15, 25 and 27, objected to as being dependent upon a rejected base claim, would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Independent claims 1, 11 and 23 have been amended to include the content of dependent claims 3, 13 and 25, respectively, and claims 3, 13 and 25 have accordingly been canceled. It is therefore submitted that independent claims 1, 11 and 23 are therefore patentable and in condition for allowance. Dependent claims 2 and 4-5, dependent claims 12 and 14-15, and dependent claims 24 and 26-27 depend from independent claims 1, 11 and 23, respectively, and thus are limited to additional features of the invention. Therefore, it is respectfully submitted that dependent claims 2, 4-5, 12, 14-15, 24 and 26-27 are also patentable, for at least the reasons set forth above with respect to independent claims 1, 11 and 23, and thus are also in condition for allowance. Reconsideration is respectfully requested.

Claims 6-8, 16 and 28 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the Cook et al. patent (U.S. Patent No. 6,343,505) in view of the Mastandrea patent. Dependent claims 7-8 depend from independent claim 6. Independent claims 6, 16 and 28, as well as dependent claim 9, have been amended. The rejections are respectfully traversed and reconsideration is requested.

The Cook et al. patent is directed to an automotive evaporative leak detection system and discloses a leak detection monitor for distinguishing levels of loss. The system appears to comprise, in pertinent part, an electric device for sensing pressure differential. Leakage determination is based on whether vapor pressure attains a predetermined threshold.

The Mastandrea patent is directed to a volumetric leak detection system and discloses two independent methods of determining leakage rate: (1) pressure and temperature measurement and (2) level and temperature measurement. The temperature effect is the major parameter that is used to correct the apparent leakage rate. Specifically, temperature sensors measure the liquid temperatures in the tank and piping, and this measure is used to determine the volumetric liquid level change (e.g., expansion) due to temperature variations and for correction for temperature effects.

Claim 6, as amended, recites an apparatus for determining leakage in an evaporated fuel processing system, the evaporated fuel processing system extending from a fuel tank to a purge passage through which evaporated fuel from the fuel tank is purged to an intake manifold of an engine, the apparatus comprising a system pressure sensor for detecting a pressure of the evaporated fuel processing system; an atmospheric pressure sensor for detecting an atmospheric pressure; and a control unit connected to the system pressure sensor and the atmospheric pressure sensor. The control unit is configured to detect a stop of the engine; determine a coefficient corresponding to the atmospheric pressure; correct the pressure detected by the system pressure sensor with the determined coefficient; close the evaporated fuel processing system after the stop of the engine is detected; and determine whether the evaporated fuel processing system has leakage after the evaporated fuel processing system is closed based on the corrected pressure and a determination value. Claim 28, as amended, recites an apparatus substantially similar to the

apparatus of claim 6. Claim 16, as amended, recites a method in accordance with the apparatus of claims 6 and 28.

It is respectfully submitted that neither the Cook et al. patent nor the Mastandrea patent, alone or in alleged combination, discloses or suggests the method or apparatus for determining leakage in an evaporated fuel processing system, as claimed in the present invention. Specifically, while the Cook et al. patent appears to disclose a sensor 74, 282 for detecting changes in vapor pressure measurement over time for determining a level of leakage based on predetermined thresholds, there does not appear to be disclosed a method or means for correcting such measurement according to atmospheric pressure. Further, while the Mastandrea patent appears to disclose a pressure transducer 66 for atmospheric pressure measurement, such measurement only appears to be used as a supplemental measurement for increasing the accuracy of a leakage calculation and not to serve as a basis for determining a corresponding coefficient for correcting the detected pressure of a evaporated fuel processing system. In contrast, in the present invention, correction of a detected pressure of an evaporated fuel processing system is according to an atmospheric pressure, for example, a coefficient corresponding to the atmospheric pressure is determined and the pressure detected by the system pressure sensor is corrected with the determined coefficient. Accordingly, neither the Cook et al. patent nor the Mastandrea patent discloses or suggests the apparatus or method for determining leakage in an evaporated fuel processing system of the present invention.

Since neither the Cook et al. patent nor the Mastandrea patent discloses or suggests the present invention as claimed, it is submitted that the alleged combination of these references also does not disclose or suggest the claimed invention. Nor even if the references were combinable, as suggested, would such alleged combination result in the claimed invention. It is therefore

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submitted that these references, either alone or in alleged combination, fail to disclose or suggest the apparatus and method for determining leakage in an evaporated fuel processing system of the present invention comprising, in pertinent part, means or steps for correcting a detected pressure of an evaporated fuel processing system comprising determining a coefficient corresponding to atmospheric pressure and correcting the detected pressure of the evaporated fuel processing system with the determined coefficient. Based upon the forgoing, it is respectfully submitted that independent claims 6, 16 and 28, as amended, are patentable and in condition for allowance. Reconsideration is respectfully requested.


It is further submitted that dependent claims 7-10 are also patentable and in condition for allowance due to their dependency upon independent claim 6, since the dependent claims differ in scope from the parent claim. Dependent claims 7-10 depend from independent claim 6, and thus are further limited to additional features of the invention. Therefore, it is respectfully submitted that the dependent claims are patentable over the Cook et al. patent in view of the Mastandrea patent for at least the reasons set forth above with respect to independent claim 6, as amended. Reconsideration is requested.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact the Applicant's undersigned

counsel at the telephone number, indicated below, to arrange for an interview to expedite the disposition of this application.

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Respectfully submitted,



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